

FIG. 1

11-1) PORTABLE TERMINAL

FIG. 2

35) I/O INTERFACE

36) INPUT UNIT

37) OUTPUT UNIT

38) STORAGE UNIT

39) COMMUNICATION UNIT

40) DRIVE

51) MAGNETIC DISC

52) OPTICAL DISC

53) MAGNETO-OPTICAL DISC

54) SEMICONDUCTOR MEMORY

11) PORTABLE TERMINAL

FIG. 3

72) RECOMMENDED TUNE LIST STORAGE UNIT

73) RECOMMENDED TUNE LIST GENERATION UNIT

74) OWNED TUNE LIST STORAGE UNIT

75) COLLECTED TUNE LIST STORAGE UNIT

71) CONTROL UNIT

76) COMMUNICATION UNIT

77) REPRODUCTION UNIT

78) OPERATION UNIT

FIG. 4

BBROADCAST (RADIO, TV)  
11) PORTABLE TERMINAL  
STORAGE MEDIUM (CD) EMD SERVER

FIGS. 5, 6

RECOMMENDATION

TITLE

ARTIST NAME

REPRODUCTION TIME

MUSIC DATA

TUNE "b"

TUNE "c"

FIG. 7

TITLE

ARTIST NAME

REPRODUCTION TIME

MUSIC DATA

TUNE "b"

FIG. 8

START RECOMMENDED TUNE LIST GENERATING PROCESS

- S1) TUNE SELECTED FROM OWNED TUNE LIST?
- S2) REPRODUCE SELECTED TUNE
- S3) TUNE REPRODUCED CONTINUOUSLY?
- S4) TUNE REPRODUCED OVER PREDETERMINED TIME PERIOD?
- S5) TUNE ADDED TO FAVORITES?
- S6) SELECT CURRENTLY REPRODUCED TUNE AS RECOMMENDED TUNE
- S7) ANY OTHER TUNE DESIGNATED FOR CONTINUOUS  
REPRODUCTION?
- S8) SWITCH TO THE OTHER TUNE
- S9) ARE THERE RECOMMENDED TUNES?
- S10) UPDATE RECOMMENDED TUNE LIST

FIG. 9

91-1) AREA

FIG. 10

TITLE

ARTIST NAME

REPRODUCTION TIME

MUSIC DATA

TUNE "a"

TUNE "d"

FIG. 11

RECOMMENDATION

TITLE

ARTIST NAME

REPRODUCTION TIME

MUSIC DATA

RECOMMENDING USER COUNT

TUNE "a"

...

FIG. 12

PORTABLE TERMINAL 11-1

PORTABLE TERMINAL 11-

2

START COLLECTED TUNE LIST GENERATING PROCESS

S21) TRANSMIT SEARCH SIGNAL

S41) SEARCH SIGNAL DETECTED?

S42) TRANSMIT OWN ID

S22) ID-EMITTING PORTABLE TERMINAL DETECTED?

S23) TRANSMIT OWN ID TO DETECTED PORTABLE TERMINAL AND  
REQUEST CONNECTION THEREWITH

S43) CONNECTION REQUEST DETECTED?

S24, S44) ESTABLISH COMMUNICATION WITH PORTABLE TERMINAL

S25) TRANSMIT OWN RECOMMENDED TUNE LIST TO CONNECTED  
TERMINAL AND REQUEST RECOMMENDED TUNE LIST THEREFROM

S45) RECOMMENDED TUNE LIST REQUESTED?  
 S46) RECEIVE RECOMMENDED TUNE LIST TRANSMITTED AND  
 RETRIEVE OWN RECOMMENDED TUNE LIST  
 S47) TRANSMIT RECOMMENDED TUNE LIST RETRIEVED  
 S26) RECEIVE RECOMMENDED TUNE LIST  
 S27, S48) TERMINATE COMMUNICATION  
 S28, S49) GENERATE COLLECTED TUNE LIST BY EXTRACTING  
 ONLY TUNES NOT FOUND IN OWN COLLECTED TUNE LIST, AND  
 INCREMENT BY 1 RECOMMENDED USER COUNTER FOR EACH TUNE  
 ALSO FOUND IN OWN LIST  
 S29, S50) DISPLAY COLLECTED TUNE LIST  
 S30) PREDETERMINED TIME PERIOD PASSED?

FIG. 13

RECOMMENDED TUNE LIST

TUNE "a"

TUNE "b"

...

FIG. 14

RECOMMENDATION

TITLE

ARTIST NAME

REPRODUCTION TIME

MUSIC DATA

RECOMMENDED USER COUNT

TUNE "a"

...

FIG. 15

START RECOMMENDED TUNE LIST GENERATING PROCESS

S71) TUNE SELECTED FROM COLLECTED TUNE LIST?

S72) REPRODUCE SELECTED TUNE

S73) TUNE REPRODUCED CONTINUOUSLY?

S74) TUNE REPRODUCED OVER PREDETERMINED TIME PERIOD?

S75) TUNE ADDED TO FAVORITES?

S76) SELECT CURRENTLY REPRODUCED TUNE AS RECOMMENDED  
TUNE

S77) ANY OTHER TUNE TO BE REPRODUCED CONTINUOUSLY?

S78) SWITCH TO THE OTHER TUNE

S79) ARE THERE RECOMMENDED TUNES?

S80) UPDATE RECOMMENDED TUNE LIST

FIG. 16

RECOMMENDATION

TITLE

ARTIST NAME

REPRODUCTION TIME

MUSIC DATA

RECOMMENDING USER COUNT

TUNE "a"

...

FIG. 17

RECOMMENDED TUNE LIST

TUNE "b"

...

FIG. 19

LISTS EXCHANGED

FIG. 21

72) RECOMMENDED TUNE LIST STORAGE UNIT

73) RECOMMENDED TUNE LIST GENERATION UNIT

74) OWNED TUNE LIST STORAGE UNIT

75) COLLECTED TUNE LIST STORAGE UNIT

71) CONTROL UNIT

76) COMMUNICATION UNIT

77) REPRODUCTION UNIT

78) OPERATION UNIT

91) TRANSFER UNIT

FIG. 22

PORTABLE TERMINAL 11-11

PORTABLE TERMINAL WITH HOP COUNT OF "n"

START COLLECTED TUNE LIST GENERATING PROCESS

S102) TRANSMIT SEARCH SIGNAL WITH HOP COUNT OF "n"

S131) SEARCH SIGNAL WITH HOP COUNT OF "n" RECEIVED?

S132) OWN HOP COUNT?

S133) TRANSFER SEARCH SIGNAL

S134) RESPONSE RECEIVED?

S135) ESTABLISH COMMUNICATION AS REPEATER

S136) END?

S137) TRANSMIT OWN ID

S103) ID-EMITTING PORTABLE TERMINAL DETECTED?

S104) TRANSMIT OWN ID TO DETECTED PORTABLE TERMINAL AND  
REQUEST CONNECTION THEREWITH

S138) CONNECTION REQUEST DETECTED?

S139) ESTABLISH COMMUNICATION WITH PORTABLE TERMINAL

S111) PREDETERMINED TIME PERIOD PASSED?

S112) COMMUNICATION PERFORMED WITH ALL PORTABLE  
TERMINALS HAVING HOP COUNT OF "n"?

S114)  $n > N$ ?

FIG. 23

S105) ESTABLISH COMMUNICATION WITH PORTABLE TERMINAL



S106) TRANSMIT OWN RECOMMENDED TUNE LIST TO CONNECTED  
TERMINAL AND REQUEST RECOMMENDED TUNE LIST THEREFROM  
S140) RECOMMENDED TUNE LIST REQUESTED?  
S141) RECEIVE RECOMMENDED TUNE LIST TRANSMITTED AND  
RETRIEVE OWN RECOMMENDED TUNE LIST  
S142) TRANSMIT RECOMMENDED TUNE LIST RETRIEVED  
S107) RECEIVE RECOMMENDED TUNE LIST  
S108, S143) TERMINATE COMMUNICATION  
S109, S144) GENERATE COLLECTED TUNE LIST BY EXTRACTING  
ONLY TUNES NOT FOUND IN OWN COLLECTED TUNE LIST, AND  
INCREMENT BY 1 RECOMMENDED USER COUNTER FOR EACH TUNE  
ALSO FOUND IN OWN LIST  
S110, S145) DISPLAY COLLECTED TUNE LIST

FIG. 24

LISTS EXCHANGED